Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS

Daniel T. Adams
REGISTERED CIVIL ENGINEER

July 1, 2004
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Daniel T. Adams — No. 46476 — Exp. 06-30-07 — CIVIL — STATE OF CALIFORNIA

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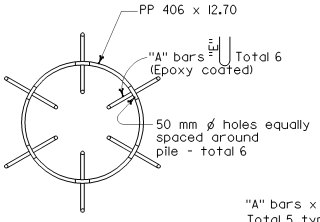
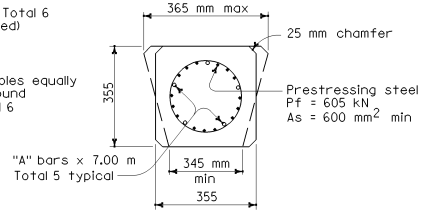
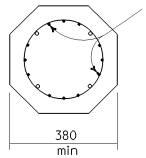


SECTION W-W

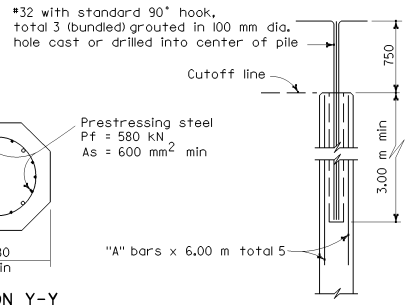
PP = Steel pipe pile



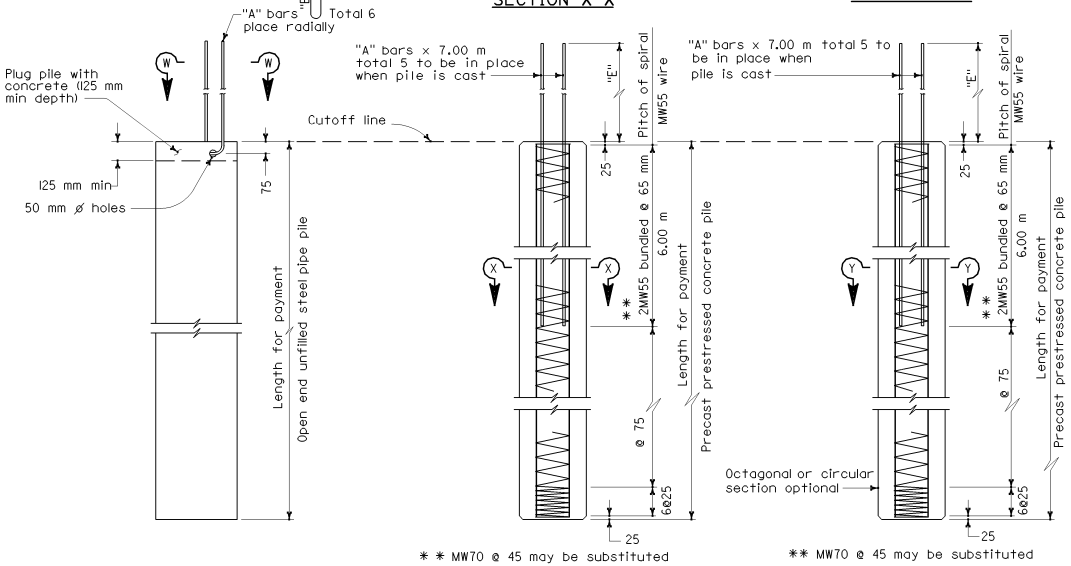
SECTION X-X



SECTION Y-Y



ALTERNATIVE PILE ANCHOR FOR PRESTRESSED PILE



ALTERNATIVE "W"

** MW70 @ 45 may be substituted

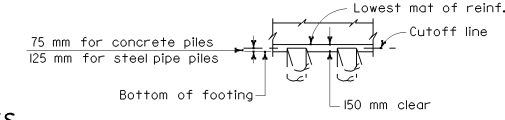
ALTERNATIVE "X"

** MW70 @ 45 may be substituted

ALTERNATIVE "Y"

	Nomimal Resistance (Tension)*	
	Not Required	Required
"A" bars	#19	#25
"E" Dimension	650	860

*See Pile Data Table in the Project Plans for Nominal Resistance (Tension) Requirements



PILE EMBEDMENT

DESIGN NOTES

DESIGN CAPACITY :

Compression = 900 kN (Service state)
= 1800 kN (Nominal axial strength)
Tension = 360 kN (Service state)
= 900 kN (Nominal axial strength)

REINFORCED CONCRETE

f'_c = 28 MPa
f_y = 420 MPa

PRECAST PRESTRESSED PILES

Pf = Prestress Force (After losses)
Concrete Strength f'_c @ 28 days = 48 MPa
f'_{ci} @ transfer = 28 MPa

STEEL PIPE PILE

Fy (minimum yield strength) = 310 MPa
Fu (minimum tensile strength) = 455 MPa

NOTES

1. Pile reinforcement extending into footing shall be hooked as required to provide clearance to top of footing.
2. Lapped splices in spiral pile reinforcement shall be lapped 80 wire diameters minimum. Spiral pile reinforcement at splices and at ends shall be terminated by a 135° hook with 150 mm tail hooked around a longitudinal bar or strand
3. At the Contractor's option, alternative steel pipe with at least the diameter and wall thickness shown on these plans may be used. The diameter shall not exceed 460 mm.
4. Alternative "W" piles shall not be used for corrosive environments.
5. Maximum cut-off length at the top of the Alternative "X" and Alternative ''Y'' piles is three (3) meters.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PILE DETAILS CLASS 900

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

B2-8